WHAT IS CLAIMED IS:

1. A method of modifying an estimated rotor angle for improved efficiency in a PMSM drive system, comprising the steps of:

monitoring a run command, a torque command, and an estimated speed; and in response thereto,

generating an output correction angle for modifying said estimated rotor angle.

2. The method of claim 1, wherein said output correction angle is added to said estimated rotor angle.

3. The method of claim 1, wherein said output correction angle is generated only for predetermined conditions of said run command, torque command, and speed.

4. The method of claim 3, wherein said output correction angle is generated (1) when the run command is asserted, (2) when said torque command is above a predetermined level, and (3) when variations in said speed are within predetermined limits.

5. A motor drive system in which an estimated rotor angle is modified for improved efficiency in a PMSM drive system, comprising:

a module which estimates a rotor angle of a motor; and

a module which monitors a run command, a torque command, and an estimated speed of said motor; and in response thereto, generates an output correction angle for modifying said estimated rotor angle.

6. The system of claim 5, wherein said output correction angle is added to said estimated rotor angle.

7. The system of claim 5, wherein said output correction angle is generated only for predetermined conditions of said run command, torque command, and speed.

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8.   The system of claim 7, wherein said output correction angle is generated (1) when the run command is asserted, (2) when said torque command is above a predetermined level, and (3) when variations in said speed are within predetermined limits.